

E 160

.U587

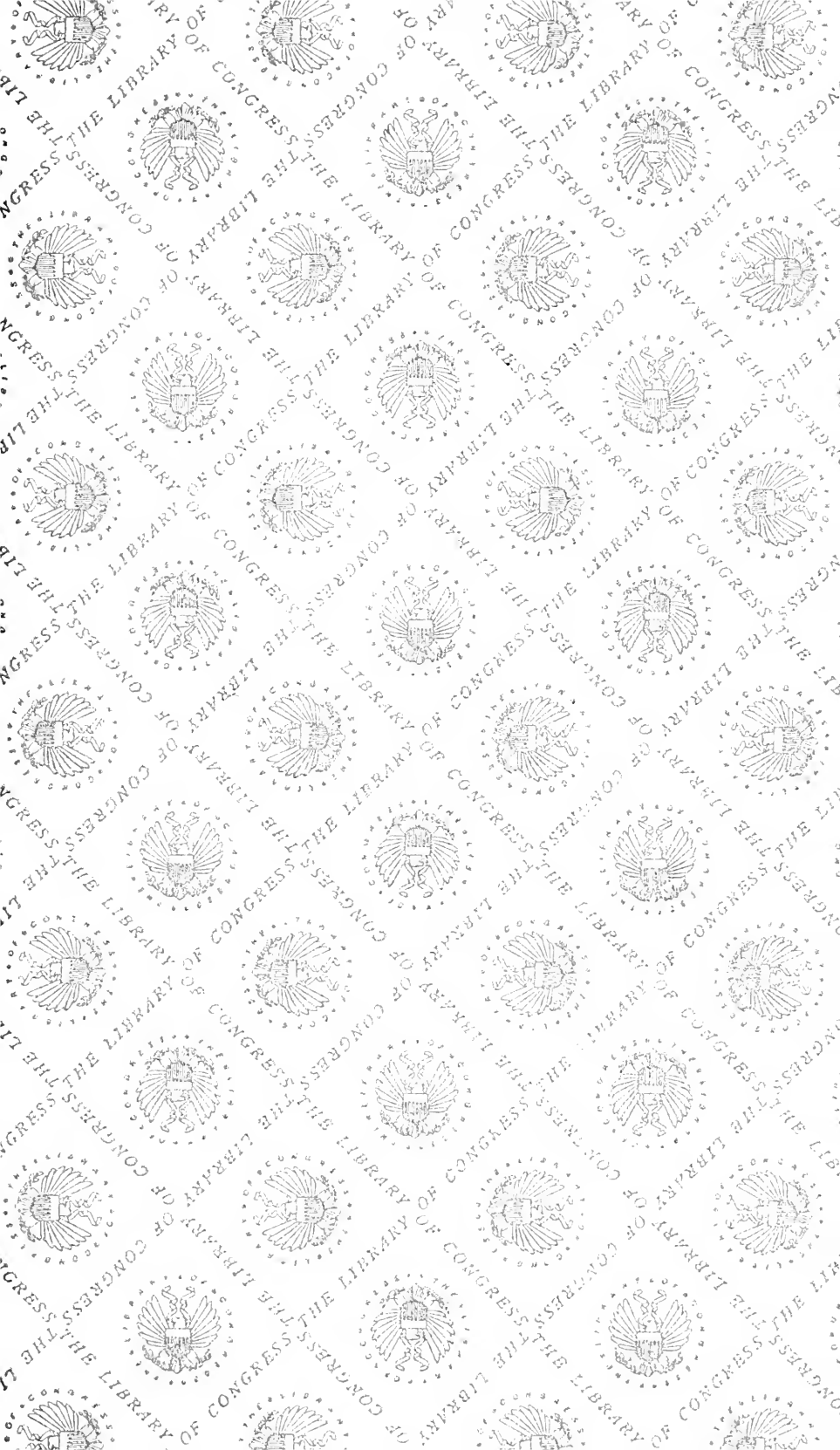
1909a

LIBRARY OF CONGRESS



00001092911





REPORT ON

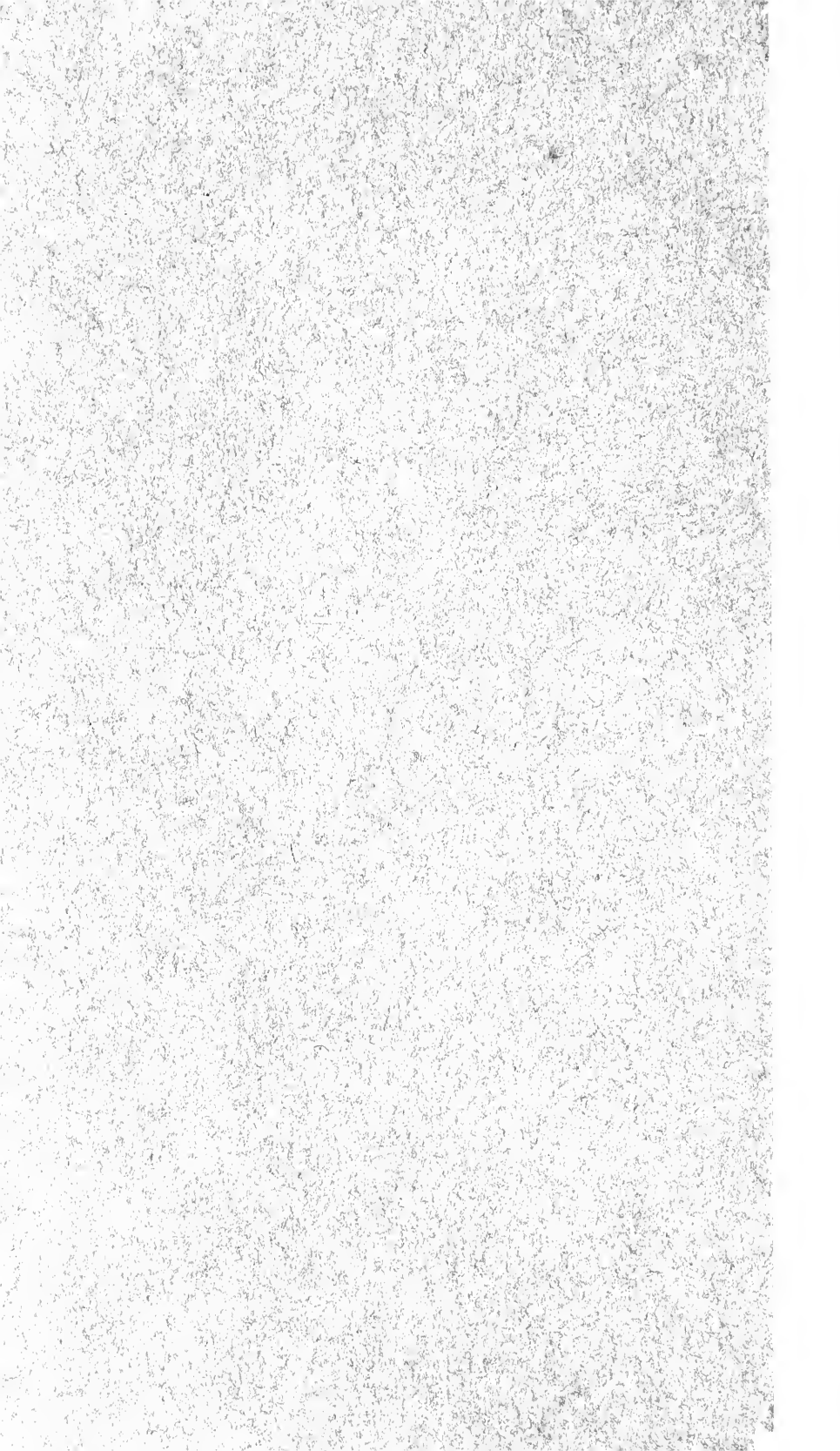
WIND CAVE, CRATER LAKE, SULLYS HILL, AND
PLATT NATIONAL PARKS, AND
CASA GRANDE RUIN

1909

COMPILED IN THE OFFICE OF
THE SECRETARY OF THE INTERIOR



WASHINGTON : GOVERNMENT PRINTING OFFICE : 1909



REPORT ON

WIND CAVE, CRATER LAKE, SULLYS HILL, AND
PLATT NATIONAL PARKS, AND
CASA GRANDE RUIN

1909

COMPILED IN THE OFFICE OF
THE SECRETARY OF THE INTERIOR



E. 51
1787
1909a

D. 61 --
JAN 22 1919

21

REPORT ON WIND CAVE, CRATER LAKE, SULLYS HILL, AND PLATT NATIONAL PARKS, AND CASA GRANDE RUIN.

WIND CAVE NATIONAL PARK.

By the act of Congress approved January 9, 1903 (32 Stat., 765), a tract of land containing 10,522 acres in the State of South Dakota, 12 miles east of the town of Hot Springs and the same distance south-east of Custer, was reserved and withdrawn from settlement, entry, sale, and other disposition, and set apart as a public park, to be known as the "Wind Cave National Park."

The park is placed under the exclusive control of the Secretary of the Interior, who, among other things, is authorized to prescribe rules and regulations and establish such service as may be deemed necessary in its management and protection, and, in his discretion, to rent or lease the cave from which the park takes its name, and also parcels of land for the erection of buildings for the accommodation of visitors. The fund arising from such rentals is covered into the Treasury and made available for expenditure in the care and improvement of the park.

At the time of the creation of the park there were 10 entries covering lands therein, aggregating 1,519.15 acres, 5 of which, covering 799.76 acres, have since been canceled, and the remaining 5 entries have been found proper in all respects and patents issued therefor, as follows:

NE. $\frac{1}{4}$ NW. $\frac{1}{4}$ and NW. $\frac{1}{4}$ NE. $\frac{1}{4}$, sec. 35, T. 5 S., R. 5 E., Black Hills meridian; Jonathan C. West; F. C. 3003, patented December 31, 1904; 80 acres.

SE. $\frac{1}{2}$ NE. $\frac{1}{4}$ and lots 1 and 2, sec. 2, T. 6 S., R. 5 E.; George A. Stabler; F. C. 2666; patented September 11, 1905; 159.39 acres.

SE. $\frac{1}{4}$, sec. 2, same township and range; Susanna D. McDonald; C. E. 3770; patented December 10, 1895; 160 acres.

NE. $\frac{1}{4}$, sec. 11, same township and range; Kate M. Stabler; F. C. 2600; patented September 26, 1902; 160 acres.

NW. $\frac{1}{4}$, sec. 12, same township and range; Margarethe Drenkhahn; F. C. 2434; patented May 8, 1901; 160 acres.

This gives a total of 719.39 acres of patented lands remaining in the park, which, for administrative purposes, should be eliminated through appropriation by Congress for their purchase.

Mr. Seth Bullock, now marshal for the district of South Dakota, has, with the consent of the Attorney-General, been continued in general charge of the reservation, in an advisory capacity, and the superintendent, Mr. J. E. Pilcher, who succeeded Mr. William A. Rankin on May 1, 1909, confers with him in regard to its administration. This course has aided in the effective management during the past season.

A revocable privilege has been granted to the wife of the superintendent, in the absence of other accommodations in the park, to furnish meals to tourists at 50 cents each, which service has proved satisfactory in the past. The old building, constructed in 1893, in which meals are served, has been repaired and greatly improved in appearance. The number of tourists to the park during the year was 3,216.

During the season six permits were granted for the transportation of passengers in and through the reservation at the rate of \$50 per vehicle, such fee being charged in the case of liverymen, outfitters, and others operating for profit. One of these was for automobile transportation.

No applications were received for the driving of cattle or other stock through the park.

Regulations corresponding to those heretofore issued for the other national parks, providing for the impounding of trespassing cattle in the Wind Cave National Park, were promulgated in 1908, but settlers and stock owners in the vicinity protested against the enforcement of such regulations, claiming that they had always used the park lands as a free range, and, in the absence of fencing, it would be very difficult to keep their stock outside of the boundaries. In view of such representations the impounding regulations were suspended indefinitely. As a protective measure against trespassing stock an early appropriation is recommended for the construction of a fence entirely around the park.

There have been no forest fires in or near the park during the year.

Some wild animals abound, especially the coyote and prairie wolf; others are the black and white tail deer, badger, porcupine, skunk, and red squirrel. There are also some game birds, such as grouse, quail, and wild duck, in the park, as well as the eagle, hawk, thrush, woodpecker, and magpie.

The superintendent reports that the spring rains damaged the roads in the southern part of the reservation, and considerable repair work has been necessary. One abutment of the first bridge south of the cave was washed out, requiring the construction of a temporary road around the same during repairs. He recommends stone abutments for the three bridges immediately south of the cave, as the gypsum soil, when wet or under heavy pressure, is difficult to hold in place, and the bridges require constant surveillance; good building stone can be obtained within 1 mile. Roads and bridges are now in fair condition, although requiring daily work on account of continuous rains.

The cave house has been remodeled, inside conveniences afforded tourists, and the stairway leading thereto replaced by a new one. It is reported that the wooden stairways in several chambers of the cave rot in a year or two and become unsafe, and that some of these now need replacing. The superintendent recommends the opening up of new chambers or territory during the winter, as no exploration work can be conducted during the tourist season.

The office building has been equipped with eave troughs, and tile piping laid to drain water from the building. A stone wall of rough ashlers is necessary along the front of the office and residence to protect the grounds from constant washing during the rainy season. The rock therefor can be obtained near by.

The superintendent recommends the construction of a rough lumber stable for the accommodation of the teams of tourists, to replace the old shed now used, which is not worth repairing. New gates for the north and south entrances have been ordered.

The buildings in the reservation now consist of the following: Superintendent's office, in good condition; cave house, in good condition; restaurant building, passable with recent repairs; and blacksmith shop, constructed of rough lumber and whitewashed during the past season.

Native trees have been transplanted to the grounds surrounding the superintendent's office and are doing well. Water has been piped to convenient points for watering the same.

An estimate for an appropriation of \$2,500 for the protection and improvement of the park has been submitted to Congress.

CRATER LAKE NATIONAL PARK.

By the act of Congress approved May 22, 1902 (32 Stat., 202), the tract of land bounded on the north by the parallel $43^{\circ} 4'$ north latitude, south by $42^{\circ} 48'$ north latitude, east by the meridian 122° west longitude, and west by the meridian $122^{\circ} 16'$ west longitude, having an area of 249 square miles, or 159,360 acres, in the State of Oregon, and including Crater Lake, was reserved and withdrawn from settlement, occupancy, or sale under the laws of the United States, and dedicated and set apart forever as a public park or pleasure ground for the benefit of the people, to be known as "Crater Lake National Park."

The act setting aside these lands for park purposes differed from legislation creating other national parks in that it provided, among other things, that the reservation should be open "to the location of mining claims and the working of the same." It was not believed, however, to be the purpose of this provision to extend the mining laws to the reservation without limitation, but only to authorize the location and working of mining claims therein in such manner as not to interfere with or prejudicially affect the general purpose for which the reservation was established. The regulations for the government of the park, which were reissued June 10, 1908, clearly define the conditions under which this privilege is to be exercised.

The Geological Survey has, at the request of the department, undertaken a topographic survey of this reservation, and the remounting of certain portions of the boundary, with a view to securing an authentic administrative map. The field work on this map is now practically completed.

In the fall of 1908 little improvement work could be attended to, owing to continual snows and heavy rains during October. Considerable repair work was necessary in November, which was also noted for heavy storms.

Late in the fall of 1908 the boat on Crater Lake and all tools and implements were properly housed, the flooring was removed from bridges and stacked up on the ground, and the fences, gates, and bridges braced to withstand the weight of the snows, which were unprecedentedly heavy during the past winter. On November 23 the superintendent, Mr. W. F. Arant, and his family left the reservation and took up winter quarters at Klamath Falls, Oreg., all tourist travel being impossible after that date.

In April of the present year the superintendent returned to the park headquarters through 12 feet of snow and discovered that considerable damage had been done to the house, barn, and some other buildings. During the months of May and June he made temporary headquarters at Fort Klamath, 17 miles from the park headquarters, in order to better care for the injured buildings.

After July 1 road, trail, and other improvements were started. By the use of heavier and stronger timbers, steeper roofs, and improved workmanship during the year it is believed that the collapsing of the roofs in winter may be avoided. At the date of this report, after expending about \$700 upon buildings, \$300 upon roads, trails, bridges, and fences, and \$100 for tools and implements, all improvements were in as good shape as the limited appropriation would permit.

The superintendent has heretofore recommended that the trail to Sand Creek and Mount Scott be converted into a good wagon road, in order to make these scenic points more accessible; also that new trails be constructed along the rim of the crater to Watchman and Glacier peaks, and from the present wagon road to the crater, thence to Crater Peak and down along Sun Creek.

At the time of the creation of the park there were 15 land entries, 12 of which, totaling 1,914.22 acres, have been patented. Unperfected homestead entries Nos. 2415, 2620, and 2660, aggregating 481.11 acres, were canceled in 1908 and 1909. The patented-land acreage includes a considerable portion of original timber land entries Nos. 2116 and 2120 (patented to Daniel M. and Arthur C. Griffith, respectively), which extend beyond the park boundary line.

The title of the State of Oregon to school sections 16 and 36 within the park boundaries had been extinguished before the creation of the reservation, by selection of other land in lieu thereof, except a tract containing 192.20 acres in the N. $\frac{1}{2}$ of sec. 16, T. 32 S., R. 7 $\frac{1}{2}$ E., which has since been disposed of by the State to private parties.

The department recommends the condemnation and purchase of all private claims with a view to better administration. The superintendent believes that in the near future summer-resort homes may be established upon such lands, which will increase the difficulties of administration and also add to the aggregate sum which the Government will eventually have to pay the owners.

The condition of animals and birds in the park is much the same as reported last year. Only those species are found which were common to the reservation before its creation. Deer, bear, and other game appear to be on the increase, and some have become quite tame. Panthers, mountain lions, lynxes, and coyotes are few, and none of the smaller game has been killed or injured by such predatory animals. Squirrels, chipmunks, and ground hogs are quite numerous, and in the higher mountains some fishers, pine martins, and other small fur-bearing animals can be found.

The increase in grouse and timber pheasants is gratifying. A number of other birds, such as the blue jay, black-headed jay, camp robber or Rocky Mountain jay, the oriole, and the snowbird, also make the park their summer home. Some broods of young ducks have been seen on Crater Lake, but Wizard Island, where they gather, is not regarded as a favorite nesting ground. Flocks of wild geese have

also been seen resting from their migratory flight, but the lake elevation is too high and cold to be the natural habitat of wild waterfowl.

During the winter season nearly all animals drift to lower grounds outside of the park boundary. The superintendent recommends the extension of the park, to include a lower section of the country on the slope of the Cascade Mountains, to afford additional protection to this game.

Fishing has been permitted in Crater Lake from July 1 to September 30 with hook and line, each person being limited to five per day. The only species in such lake are the rainbow and lake trout. There were no fish in the lake naturally, but it is believed that the liberation of a large number of the young of the rainbow trout would greatly improve this body of water. Food fish from near by could be secured to keep up the quality and number of such fish. The Dolly Varden trout and the lake trout from Klamath Lake are found in Anna Creek. All waters would be improved by stocking with good varieties of trout.

Only one small forest fire was discovered in the vicinity of Crater Peak; by prompt attention and the assistance of a heavy rain this was extinguished before any damage was done.

Camp Arant, maintained by the Crater Lake Company under contract with this department, was opened July 5 for the accommodation of tourists. Camp Crater, 5 miles from the former and upon the rim of the crater, was established July 20. Five hundred and forty-four persons were accommodated at these camps, and a large proportion thereof took the boat trip upon the lake, this and other transportation service being permitted under the Crater Lake Company's contract.

The registration book shows a total of 4,171 persons visiting the reservation. Making allowance for those unable to register, it is estimated that the total was probably 5,000. Few persons camped in the park more than one night.

The superintendent submits an estimate of the appropriation required for the next fiscal year, as follows: Salaries, \$2,865; construction and repair of roads, trails, and bridges, \$29,200; repairs and improvements to buildings and fences, electric lighting plant, tools and implements, and emergency expenses, \$3,275; total, \$35,340.

PLATT NATIONAL PARK.

By the acts of Congress of July 1, 1902 (32 Stat., 641), and April 21, 1904 (33 Stat., 220), 629.33 and 218.89 acres, respectively, at the town of Sulphur, Okla. (then Indian Territory), were segregated as the "Sulphur Springs Reservation," which designation, by joint resolution approved June 29, 1906, was changed to "Platt National Park."

The park, with a total area of 848.22 acres, extends in irregular form a distance of approximately 3 miles from northeast to southwest along Travertine Creek, including a portion of Rock Creek, which empties into the former, and it has a circuit of 9 miles.

Within the park are 33 known mineral and 2 nonmineral springs. The principal groups are the Bromide and Bromide-Sulphur springs in the southwestern part of the park, Beach and Pavilion springs in

the northwestern corner, and the Wilson group in the southern part. Sulphur springs predominate, but there are also bromide, soda, and iron varieties. The Antelope and Buffalo springs, nonmineral in character, are situated at the extreme northeastern end of the Platt National Park, with an elevation of 1,083 feet above sea level and an approximate discharge of 5,000,000 gallons daily into Travertine Creek.

The following is a statement of the mineral springs which have been to some extent developed and improved, together with the estimated daily flow in each case:

	Gallons.
Bromide Springs (3).....	275
Bromide-Sulphur.....	250
Taff or Black Sulphur.....	500
Hillside.....	129, 600
Pavilion Springs (7).....	200, 600
Beach Springs (3).....	125, 000
Wilson.....	1, 000
Jericho.....	200

A watchman oversees the distribution of water at Bromide Springs.

The pavilion over Hillside Spring was very badly damaged by severe windstorms during the past year, and is now in a dilapidated and dangerous condition. The superintendent, Mr. A. R. Greene, suggests the construction of a new pavilion at this point commensurate with the importance of the spring, with a semicircular inclosure of concrete for protection from the hillside drainage, a flooring of concrete, and a bowl or reservoir in the center of the pavilion, together with concrete seats, the estimated cost being \$2,500.

Approximately 2,500 head of cattle and horses have been driven across the park during the year. But little, if any, of this stock was shipped from Sulphur, it being in transit from the winter range in the brakes of the Washita to the summer range on the prairie north of the town.

The park was fenced during the year, at a total cost of \$1,855. Nearly 9 miles of fencing was required for the boundaries of the park and 3 miles for the lanes constructed for the benefit of the public. The principal lane, which has been named "Buckhorn," leads from Second street on the north, by the most practicable route, to the southeastern corner of the park, and is a thoroughfare between Scullin and Sulphur, also accommodating a large farming community along Buckhorn and Oil creeks. Branching off from this is a lane to Bromide Springs, affording a short and pleasant route for citizens on the north; this has been named "Bromide." The Sulphur-Bromide lane starts from the same point on Buckhorn lane, running to Sulphur-Bromide Springs, and accommodates a farming community along lower Rock Creek. Another short lane, the "Lockwood," affords entrance to the park from the southeast; this connects with the Brookside trail, which runs the whole length of Travertine Creek.

The Cliffside foot trail, constructed this year, runs westerly from Sulphur-Bromide Springs and meanders down the face of the cliff to Bromide Springs. It is three-quarters of a mile in length, is much frequented, and makes accessible some very beautiful scenery. The main entrance to the reservation at Second street on the north has been graded and improved, and this is the greatest thoroughfare

for persons on foot approaching West Central Park and the Pavilion Springs. The Riverside trail, extending from near Pavilion Springs to a junction with Cliffside trail, affords another short route from the north. The condition of all roads and trails is fairly good. After July 1, 1909, only small outlays from the monthly contingent fund can be used for supervision and repairs, owing to the limited amount available, and little can be done should the park be visited by torrential rains, such as were experienced last season.

The rock arch footbridge, constructed across Travertine Creek during the year, at a total cost of \$3,985, was completed and dedicated as "Lincoln Bridge" on February 12, 1909, with appropriate exercises; it is universally admired for its beauty and durability. Ornamental shrubs and flowers have been planted at each end.

A massive steel bridge was completed across Rock Creek at Davis avenue on June 16, 1909, at a total cost of \$7,380, and dedicated upon the day of opening as the "Washington Bridge." This bridge has a roadway of reinforced concrete, with a pavement of creosoted wooden blocks on top. Six foot sidewalks are made of reinforced concrete without the blocks. The superintendent considers this the most useful improvement that could have been made in the park; it affords a highway for heavy teams between two railroad stations, and is of special benefit to the city of Sulphur rather than the park.

Other small wagon or foot bridges were constructed during the year. One, built across a rocky gulch in East Central Park, was made necessary to replace a bridge theretofore constructed across Sulphur Run, which was abandoned with a view to the realignment of the wagon road crossing the park at its widest point. A new culvert was built along the new road to accommodate the surface water of Sulphur Run ravine below Pavilion Springs.

The Bromide Springs wire suspension bridge, completed June 20, 1908, has been used by about 136,590 persons visiting the Bromide Springs during the first year of its existence, and it was so well built that no repairs or outlay of any kind have been necessary.

The salaries of the park force during the fiscal year aggregated \$5,545.50. Improvements (other than the two large bridges and fencing, for which amounts have been given), as well as electric light, telephone, and other services, and contingencies, aggregated \$3,440.72. The grand total of expenditures was \$22,206.22, leaving on July 1, 1909, an available balance of \$5,843.14, which, with the small revenue now accruing from transportation and other licenses (\$114 so far this year), will not be sufficient to do any more than carry the present force of employees, provide electric light and telephone service, and a small contingent fund.

Thirteen transportation and two photographic permits have been issued since July 1, 1909. It is almost impossible to secure any proposals for establishing refreshment stand, boating, or other services in the park, although its location adjoining the town of Sulphur is in its favor. Formerly the mineral waters were shipped from Sulphur in considerable quantities, the Bromide Springs waters being particularly noted for their medicinal qualities, but no applications for a license of this character have been received in the past few years.

As a result of a topographic survey undertaken by the Geological Survey in 1908, a map of the park showing drainage, location of

the springs, etc., has now been issued, and is of great advantage in administrative work.

In 1907 the city of Sulphur was granted temporary permission to take water from Travertine Creek, just below what is known as "Little Niagara," for domestic water supply and fire protection, to the extent of 100,000 gallons daily. The provision was made that the city should construct a 500,000-gallon storage reservoir outside the park limits, but this requirement has not yet been complied with. It is stated that the city is in financial straits, can not get the money to make such improvements, and will endeavor to have Congress authorize the use of this water permanently and with less restrictions.

In 1907 and 1908 estimates were submitted to Congress for the construction of a sanitary sewer system, with laterals to intersect others connecting with the city's system, to convey from the park lands the drainage and sewage which, owing to the topographic conditions, now run into and contaminate the creeks and springs of the reservation. The engineer's estimate of the cost of a system with an outlet beyond Bromide Springs, just outside of the boundary, was \$27,962; this, the superintendent thinks, would probably be increased to \$35,000 before completion of the work. He now submits a plan which he believes would provide an equally serviceable sewer—the construction of a dam across Rock Creek and the valley at a point considerably above Bromide Springs with the triple purpose of disposing of the sewage, establishing an electric-light plant for the park, and providing an expanse of water upon which sail, power, and row boats could be operated. This will result in submerging Coney Island and will form a lake with the surface about 940 feet above sea level. This plan would obviate the necessity for extending the sewer any farther than the lower end of Coney Island, on the eastern side of the submerged area, the whole project being estimated to cost \$18,650. The merits of this plan have not been investigated by the department.

Last year Congress made an appropriation for the present fiscal year (\$15,000 of which was to be expended for the sewer system, provided the city expended an equal sum), payable from the revenues. As the balance of the revenue fund is barely sufficient to cover salaries, however, no such improvement can be undertaken, and furthermore, it is understood that the city is not in a financial condition to do its part. On account of the lack of sewerage facilities and the long drought during the past summer, the park has become quite filthy in certain parts, and the residents of the locality have presented petitions urging immediate appropriation by Congress to improve the sanitary conditions, which threaten the health of the community. If an appropriation is made for the park in the sum of \$25,000, the estimate submitted to Congress, it will be possible to begin sewer construction next year and carry on the entire project to completion as future appropriations are available.

Most gratifying results have been obtained by sodding portions of the park with Bermuda grass, and the cultivation of oats, alfalfa, corn, etc., for the park stock. This also prevents these tracts from growing up in rank weeds, which mar the landscape and produce disease.

The superintendent recommends that the present restrictions imposed upon stock owners through the construction of the fence to keep out their stock be adhered to by allowing the fences and lanes

to remain as at present, where they were placed after careful consideration. He reports that a residence and administration building will be required in the near future, and should be located upon a commanding knoll southwest of the present office, where it will afford a view of the whole park and of the city of Sulphur. The further recommendation is made that an electric-light plant be established.

The park has recognized advantages for the holding of general conventions, and accommodating religious, educational, fraternal, and other gatherings. Approximately 25,000 persons visited the park during the year, 1,000 coming by wagon and camping for three days or more. The Bromide Springs register shows an attendance during the fiscal year of 106,332. Many of these were citizens of Sulphur, visiting the springs each day, who were counted at each visit. The Pavilion Springs probably had a still greater local attendance.

SULLYS HILL PARK.

This reservation, set aside by executive proclamation dated June 2, 1904, under the act approved April 27, 1904 (33 Stat., 319), contains about 780 acres. It is located on the south shore of Devils Lake, North Dakota, having about 2 miles of shore line, with its western boundary 1 mile east of the Fort Totten Indian School. Inasmuch as no appropriation has been made for the care and protection of this reservation, Mr. Charles M. Ziebach, in charge of the Indian Industrial School, Fort Totten, has been continued as acting superintendent, and required to exercise the necessary supervision and control over the same until appropriation is made therefor by Congress.

The tract is well wooded and has an ample supply of water and many rugged hills, among which, on the western boundary, lies what is known as "Sullys Hill." In the southwestern part is a small body of water known as "Sweet Water Lake," west of which the surface is generally level and the soil good.

Approximately 40 persons camped in the park for three days or more during the past summer, and 150 spent one day in sight-seeing.

The steamboat landing is at least 2 miles from the park, and the acting superintendent recommends the building of a dock to allow boats to land within the park limits, to make it more accessible for visitors. Until this is done, as well as repair work upon the roads, construction of new ones, the walling up of springs, etc., the reservation is not likely to be patronized to any extent. There are no buildings or improvements of any kind in the park.

The acting superintendent renews his previous estimates for an appropriation of \$3,000 for the fiscal year 1911.

CASA GRANDE RUIN.

This reservation is located near Florence, Ariz., about 18 miles northeast of Casa Grande station, on the Southern Pacific Railroad, and contains about 480 acres. It was set aside by executive order dated June 22, 1902, under the act approved March 2, 1889 (25 Stat., 961).

Casa Grande is an Indian ruin of undetermined antiquity, which was discovered in 1694 by Padre Kino, a Jesuit missionary. This

great house is said to be the most important ruin of its type in the Southwest, and as such it has strong claims for archaeological study, repair, and permanent preservation. It is built of puddled clay, molded into walls and dried in the sun, and is of perishable character. The main building was originally five or six stories high and covered a space 59 feet by 43 feet 3 inches. The walls have been gradually disintegrating, owing to the action of the elements. A corrugated iron roof has heretofore been erected over this building to protect it, so far as practicable, from further decay.

Surrounding Casa Grande proper is a rectangular walled inclosure or "compound," having an area of about 2 acres. In this inclosure, which has been called "Compound A," there have recently been excavated a number of buildings or clusters of rooms, and others are known to exist which have not yet been excavated. Two other compounds have been discovered and designated, respectively, "Compound B" and "Compound C." The former has been the scene of operations during the past year, but the latter has not yet been excavated and is still in the form of a mound. The three compounds together constitute what is known as the "Casa Grande" group of ruins.

The custodian, Mr. Frank Pinkley, who resides on the reservation, reports that the ground plan of the ruins was increased by some 57 or 58 rooms, a number of large plazas, and surrounding walls, making the total number of rooms now open on the ground floor over 100, and as a result of work done by Doctor Fewkes, of the Bureau of Ethnology, the points of interest to visitors have been materially increased.

No money, other than the custodian's regular salary, was expended this year.

Mr. Pinkley recommends that an appropriation of \$3,000 be secured for the erection of a museum building near the ruins to shelter the results of future excavations, and to place the household utensils, war and agricultural instruments, and other objects belonging to the prehistoric people in proper relation to the architecture and environment, to facilitate the study, from a scientist's point of view, of any one phase of the aboriginal life. He also recommends an appropriation of \$2,000 for further excavation and development work.

It is reported that there is need for literature for distribution to visitors, and that probably 2,000 fifty-page pamphlets could be easily disposed of the first year, and greatly increase interest in the reservation.

There are to the east of the Casa Grande Ruin two other groups of ruins, which the custodian reports are on land thrown open to settlement, and one of which is endangered by the proposed construction of a railroad, and he suggests that such ruins be added by Congress to the reservation now existing.





